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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,894	03/15/2005	Bin Yin	NL 020927	9543

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
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NGUYEN, LINH THI

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/527,894	Applicant(s) YIN ET AL.	
	Examiner Linh T. Nguyen	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-12 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 8, 11 and 12/1 are rejected under 35 U.S.C. 102(b) as being unpatentable by Shinoda et al (US Patent number 5434834).

In regards to claims 1, 5, 8, and 11, Shinoda et al discloses an apparatus, optical unit, method and program for reading and/or writing data from and/or onto a data carrier (Fig. 11), said data carrier containing wobbled tracks (Fig. 12), said apparatus having scanning means for scanning said tracks (Fig. 11, elements 4, 5, 20, 24, and 28), detection means for detecting at least two elementary signals (Fig. 11, signals D7 and D8) when scanning said tracks, wobble recovery means for generating a wobble signal (D) from said at least two elementary signals (Fig. 11, element D8), and wobble processing means for filtering said at least two elementary signals with at least an adaptive filter (Fig. 11, element D7 is filter by element 82) and for generating an improved wobble signal by subtracting said filtered elementary signals from said wobble signal (Fig. 11, element 92).

In regards to claim 12/1, Shinoda et al discloses an apparatus comprising sampling means for sampling said at least two elementary signals at a frequency lower

than the data bit rate (Column 9, lines 51-54; LPF eliminate frequency of 22 kilohertz which is low compared to the data bit rate). The motivation is the same as claim 2 above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 6, 7, 9, 10 and 12/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinoda et al in view of Bakx (US Patent number 561892).

In regards to claims 2, 6, and 9, Shinoda discloses everything claimed in claims 1, 5, and 8. However Shinoda does not disclose an apparatus, optical unit, and method having data recovery means for generating a data signal from said at least two elementary signals, wherein said adaptive filter uses filtering coefficients chosen so as to minimize the cross-correlation between said improved wobble signal and said data signal.

In the same field of endeavor, Bakx discloses an apparatus, optical unit, and method having data recovery means for generating a data signal from said at least two elementary signals (I1 and I2), wherein said adaptive filter uses filtering coefficients (Column 4, lines 48-55, and Column 5, lines 52-61) chosen so as to minimize the cross-correlation between said improved wobble signal (PP\*) and said data signal (Fig. 5). At

the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the apparatus for reading/writing data from a media of Shinoda to have a different weighting coefficients between improved wobble signal (PP\*) and the data signal (CA) of Bakx. The motivations for doing so would have been to filter out the unwanted wobble signals.

In regards to claims 4, 7, and 10, Shinoda et al does not but Bakx discloses an apparatus, optical unit, and method, wherein said adaptive filter uses filtering coefficients (Column 4, lines 48-55) chosen so as to minimize the difference between a scaled version of the improved wobble signal (PP\*) and a reference wobble signal (PP) reconstructed on the basis of the generated wobble signal (Fig. 4). The motivation is the same as claim 2 above.

In regards to claim 12/2, Shinoda et al discloses an apparatus comprising sampling means for sampling said at least two elementary signals at a frequency lower than the data bit rate (Column 9, lines 51-54; LPF eliminate frequency of 22 kilohertz which is low compared to the data bit rate). The motivation is the same as claim 2 above.

#### ***Allowable Subject Matter***

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base

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claim and any intervening claims. The reason for allowance was stated in the last office action.

### ***Response to Arguments***

Applicant's arguments, see page 8, lines 5-14, filed 11/22/06, with respect to the rejection(s) of claim(s) 1 under Kim have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shinoda et al.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN  
February 1, 2007



WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER